#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016537 Address: 333 Burma Road **Date Inspected:** 30-Aug-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** Listed below. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** S.A.S. components

#### **Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG Lifts 5W/6W plate E field splice welding
- 2) OBG Lifts 4W/5W plate C back gouging
- 3) OBG Lift 7E post arrival inspection at Pier 7
- 1) The QAI observed ABF personnel setting up and welding the inside of plate E at OBG lifts 5W/6W field splice. The QAI noted that this 3G CJP weld is being made in segment E2. The QAI noted that the Quality Control (QC) Inspector Bernie Docena is monitoring this welding. The QAI observed ABF workers Jin Quan Huang, ID 9340, and Song Tao Huang, ID 3794, making the welds with gas shielded flux cored arc welding (FCAW-G). The QAI was informed that welding procedure specification (WPS) ABF-WPS-D15-3040A-1 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. See the attached photo.
- 2) The QAI observed ABF personnel back gouging field splice welds C1 and C2 at OBG lifts 4W/5W. The QAI observed that the backing bars have been removed and the weld joint is being prepared for welding. The QAI noted that the QC Inspector Jim Cunningham is near this work area and has magnetic particle testing (MT) equipment with him. The QAI asked the QC Inspector if he was monitoring the work at this location. The QC Inspector replied that there is no welding being performed and the QC Inspector left the work area with out and the

## WELDING INSPECTION REPORT

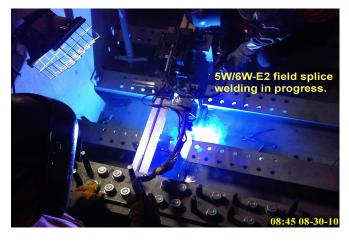
(Continued Page 2 of 3)

QAI was not able to ask any further questions to the QC Inspector. The QAI made general observations of the back gouged weld joint and noted that it appears to been inspected by MT. The QAI noted that the weld joint appeared to be ready for welding. The QAI noted that welding equipment is being set up but did not observe any welding at this location.

3) The QAI accompanied Caltrans personnel Jason Wilcox, David Bradd, ABF representatives Chuck Kanapicki, Leonard Cross, Bernie Docena, the OAIs Robert Mertz and Joselito Lizardo in conducting the post arrival inspection of voyage 4 components. Voyage 4 contained OBG segments 7E, 7W, 8E, 8W and Crossbeams 7, 8, 9 and 10. The persons mentioned split into groups and began the post arrival inspection of OBG 7E interior. During the inspection, the QAI noted that painted surfaces have been marred where there is contact with shipping supports. The QAI also noted that there appears to be an arc strike at a shipping brace location. There was no other shipping related damage observed during this inspection. The QAI noted that OBG 7W and 8W have not been examined for post arrival inspection and are not ready at this time. See the attached photo.

The QAI reviewed contract related documents including the submitted and approved Welding Quality Control Plan (WQCP) and approved revisions to the WQCP. The QAI continued the courtesy review of the contractor's welding report submittal # 1536 Rev. 20. The QAI continued consolidating the information from previous welding report submittals to identify missing reports of inspections. The QAI also participated in a meeting regarding the reviewed welding report submittals. ABF QC Manger Jim Bowers discussed the courtesy review of the Rev. 19 submittal with the QAI, the QAI Lead Bill Levell and the QAI Robert Mertz. There was general agreement on reporting requirements of NDT reports that will be reflected in the future submittals.





#### **Summary of Conversations:**

The QAI had general conversations with ABF and Caltrans personnel during this shift. As noted above, the QAI had conversations with the QC Manager Jim Bowers, regarding the welding report submittals and the courtesy review of submittal # 1536 Rev. 19. Also as noted above, the QAI participated in the post arrival inspection and had general conversations regarding the appearance of the inspected components. The QAI relayed the status of the submittal reviews and the discussion with the QC Inspector to the QAI Lead Bill Levell. The QAI also relayed the observations of post arrival inspection to the QAI Lead Bill Levell. The QAI was also informed that 4 of ABF's welding personnel have updated welding certifications. The QAI was informed that formal approval of the welder's certifications will be provided in the next WQCP submittal. Except as described above, there were no other notable conversations or observations.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi, (916)813-3677,, who represents the Office of Structural Materials for your project.

Inspected By:	Croff,Scott	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer